



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,602	04/03/2006	Wolfgang Ripper	10191/3963	2233
26646	7590	08/10/2006	EXAMINER	
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			TRAN, BINH Q	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/527,602	Applicant(s) RIPPER ET AL.	
	Examiner BINH Q. TRAN	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 17-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/15/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Receipt and entry of Applicant's Preliminary Amendment dated March 15, 2005 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 17-36 are rejected under 35 U.S.C. 102 (e) as being anticipated by Fischer (Patent Number US 2003/0014194).

Regarding claims 17 and 28-29, Fischer discloses an exhaust gas purification system for purifying an exhaust gas stream of an internal combustion engine (1), comprising: at least one oxidation catalytic converter (7) provided in an exhaust gas duct of the internal combustion engine; at least one device (8) for selective catalytic reduction of the exhaust gas stream, the at least one device (8) being provided downstream of the at least one oxidation catalytic converter (7); and a feed device (e.g. 10, 17, 18, 20, 22) for feeding a reducing agent into the exhaust gas stream one of upstream of the at least one device for selective catalytic reduction and in the at least one device for selective catalytic reduction (See Paragraphs 0031-0034); and a switch-over device (e.g. 20, 22, 35, 36) for selectively feeding the reducing agent into the exhaust gas stream one of upstream of the at least one oxidation catalytic converter and in the at least one oxidation catalytic converter (e.g. See Paragraphs 0032-0036).

Regarding claim 18, Fischer further discloses that the gas purification system as recited in switch-over device is a valve (e.g. See Paragraphs 0032-0036).

Regarding claim 19, Fischer further discloses that the -over device is a directional control valve (e.g. See Paragraphs 0032-0036).

Regarding claim 20, Fischer further discloses that the gas purification system as recited in switch-over device is a mixing valve (e.g. See Paragraphs 0032-0036).

Regarding claim 21, Fischer further discloses that the switch-over device is temperature-controlled (e.g. See Paragraph 0035).

Regarding claim 22, Fischer further discloses that the switch-over device is temperature-controlled (e.g. See Paragraph 0035).

Regarding claim 23, Fischer further discloses that the feed device has a metering device and a nozzle for distributing and atomizing the reducing agent in the exhaust gas stream (e.g. See Paragraphs 0032-0036).

Regarding claim 24, Fischer further discloses that the feed device has a metering device and a nozzle for distributing and atomizing the reducing agent the exhaust gas stream (e.g. See Paragraphs 0032-0036).

Regarding claim 25, Fischer further discloses that the at least one oxidation catalytic converter is disposed in the immediate vicinity of an exhaust gas outlet of the internal combustion engine (e.g. See Paragraphs 0032-0036).

Regarding claim 26, Fischer further discloses that the at least one oxidation catalytic converter is a catalytically coated particle filter (e.g. See Paragraphs 0032-0036).

Regarding claim 27, Fischer further discloses at least one particle filter provided between the at least one oxidation catalytic converter and the at least one device for selective catalytic reduction (e.g. See Paragraphs 0032-0036).

Regarding claim 30, Fischer further discloses that the reducing agent is fed into the at least one oxidation catalytic converter and the at least one device for selective catalytic reduction simultaneously during a transition period (e.g. See Paragraphs 0032-0036).

Regarding claim 31, Fischer further discloses that the reducing agent is fed by a nozzle (e.g. See Paragraphs 0032-0036).

Regarding claim 32, Fischer further discloses that the selective feeding of the reducing agent function of temperature (e.g. See Paragraphs 0032-0036).

Regarding claim 33, Fischer further discloses that the reducing agent is fed into the at least one oxidation catalytic converter at an exhaust gas temperature of less than approximately 180 °C in the at converter least one oxidation catalytic (e.g. See Paragraphs 0032-0036; and Claims 2-3).

Regarding claim 34, Fischer further discloses that the reducing agent is fed into the at least one oxidation catalytic converter at an exhaust gas temperature of less than approximately 180 °C in the at least one oxidation catalytic converter (e.g. See Paragraphs 0032-0036; and Claims 2-3).

Regarding claim 35, Fischer further discloses that the reducing agent is fed into the at least one device for selective catalytic reduction at an exhaust gas temperature of more than approximately 180 °C in the at least one device for selective catalytic reduction (e.g. See Paragraphs 0032-0036; and Claims 2-3).

Regarding claim 36, Fischer further discloses that the reducing agent is fed into the at least one device for selective catalytic reduction at an exhaust gas temperature of more than approximately 180 °C in the at least one device for selective catalytic reduction (e.g. See Paragraphs 0032-0036; and Claims 2-3).

Claims 17-36 are rejected under 35 U.S.C. 102 (e) as being anticipated by Wu et al. (Wu) (Patent Number 6,293,097).

Regarding claims 17 and 28-29, Wu discloses an exhaust gas purification system for purifying an exhaust gas stream of an internal combustion engine (14), comprising: at least one oxidation catalytic converter (22) provided in an exhaust gas duct of the internal combustion

Art Unit: 3748

engine; at least one device (24) for selective catalytic reduction of the exhaust gas stream, the at least one device (8) being provided downstream of the at least one oxidation catalytic converter (22); and a feed device (e.g. 10, 30, 50) for feeding a reducing agent into the exhaust gas stream one of upstream of the at least one device for selective catalytic reduction and in the at least one device for selective catalytic reduction (See col. 3, lines 1-65); and a switch-over device (e.g. 66, 70) for selectively feeding the reducing agent into the exhaust gas stream one of upstream of the at least one oxidation catalytic converter and in the at least one oxidation catalytic converter (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 18, Wu further discloses that the gas purification system as recited in switch-over device is a valve (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 19, Wu further discloses that the -over device is a directional control valve (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 20, Wu further discloses that the gas purification system as recited in switch-over device is a mixing valve (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 21, Wu further discloses that the switch-over device is temperature-controlled (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 22, Wu further discloses that the switch-over device is temperature-controlled (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 23, Wu further discloses that the feed device has a metering device and a nozzle for distributing and atomizing the reducing agent in the exhaust gas stream (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 24, Wu further discloses that the feed device has a metering device and a nozzle for distributing and atomizing the reducing agent the exhaust gas stream (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 25, Wu further discloses that the at least one oxidation catalytic converter is disposed in the immediate vicinity of an exhaust gas outlet of the internal combustion engine (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 26, Wu further discloses that the at least one oxidation catalytic converter is a catalytically coated particle filter (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 27, Wu further discloses at least one particle filter provided between the at least one oxidation catalytic converter and the at least one device for selective catalytic reduction (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 30, Wu further discloses that the reducing agent is fed into the at least one oxidation catalytic converter and the at least one device for selective catalytic reduction simultaneously during a transition period (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 31, Wu further discloses that the reducing agent is fed by a nozzle (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 32, Wu further discloses that the selective feeding of the reducing agent function of temperature (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 33, Wu further discloses that the reducing agent is fed into the at least one oxidation catalytic converter at an exhaust gas temperature of less than approximately 180 °C in the at converter least one oxidation catalytic (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Art Unit: 3748

Regarding claim 34, Wu further discloses that the reducing agent is fed into the at least one oxidation catalytic converter at an exhaust gas temperature of less than approximately 180 °C in the at least one oxidation catalytic converter (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 35, Wu further discloses that the reducing agent is fed into the at least one device for selective catalytic reduction at an exhaust gas temperature of more than approximately 180 °C in the at least one device for selective catalytic reduction (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Regarding claim 36, Wu further discloses that the reducing agent is fed into the at least one device for selective catalytic reduction at an exhaust gas temperature of more than approximately 180 °C in the at least one device for selective catalytic reduction (e.g. See col. 4, lines 42-67; col. 5, lines 1-53).

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of six patents:

Feeley et al. (Pat. No. 6471924), Patchett (Pat. No. 6125629), Duvinage et al. (Pat. No. 6892529), Kupe et al. (Pat. No. 6832473), Funk et al. (Pat. No. 7065958), and Szymkowicz (Pat. No. 6915629) all disclose an exhaust gas purification for use with an internal combustion engine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (571) 272-4865. The examiner can normally be reached on Monday-Friday from 8:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (571) 272-4859. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BT
August 04, 2006



Binh Q. Tran
Patent Examiner
Art Unit 3748